

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of the claims in the application:

- 1 1. (Currently Amended) A reliability buffering method associated with a project planning  
2 model having project plan data and having a plurality of activities, wherein each one of the  
3 plurality of activities has one or more activity time precedence relationships, comprising:  
4 adding activity characteristics data to the project plan data;  
5 generating a reliability buffer duration value;  
6 adding the reliability buffer duration value corresponding to the project plan data; and  
7 placing a reliability buffer having a time duration determined in accordance with the  
8 reliability buffer duration value in front of and associated with a downstream activity.
- 1 2. (Original) The reliability buffering method of claim 1, further comprising:  
2 adding activity relationship data to the project plan data.
- 1 3. (Original) The reliability buffering method of claim 1, further comprising:  
2 altering the one or more activity time precedence relationships.
- 1 4. (Currently Amended) A reliability buffering method associated with a project planning  
2 model having project plan data, having a project schedule, and having a plurality of activities,  
3 comprising:  
4 selecting a downstream activity from among the plurality of activities;  
5 adding activity relationship data associated with the downstream activity and with at least  
6 one upstream activity to the project plan data;  
7 adding activity characteristics data associated with the downstream activity to the project  
8 plan data; and

9 placing a reliability ~~time~~-buffer in a buffer time precedence relationship with the  
10 downstream activity to provide a buffered downstream activity.

1 5. (Currently Amended) The reliability buffering method of claim 4, wherein adding activity  
2 relationship data comprises:

3 adding a downstream sensitivity value ~~associated with the activity time precedence~~  
4 ~~relationship~~ to the project plan data.

1 6. (Original) The reliability buffering method of claim 4, wherein adding activity characteristics  
2 data comprises:

3 adding an activity reliability value to the project plan data.

1 7. (Original) The reliability buffering method of claim 4, wherein adding activity characteristics  
2 data comprises:

3 adding an activity production rate value to the project plan data.

1 8. (Original) The reliability buffering method of claim 4, wherein the buffer time precedence  
2 relationship is finish to start.

1 9. (Currently Amended) The reliability buffering method of claim 4, further comprising:

2 generating a reliability buffer duration value associated with the reliability buffer and  
3 ~~corresponding to the project plan data; and~~

4 generating an activity time precedence relationship between the buffered downstream  
5 activity and the at least one upstream activity, ~~corresponding to the project plan data; ; and~~

6 adding the reliability buffer duration value and the activity time precedence relationship  
7 to the project plan data to provide an initial reliability buffer project plan.

1 10. (Original) The reliability buffering method of claim 9, wherein the activity time precedence  
2 relationship is selected from the group consisting of finish to start, finish to finish, start to start,  
3 and start to finish.

1 11. (Original) The reliability buffering method of claim 9, wherein generating the reliability  
2 buffer duration value comprises:  
3 selecting one or more upstream activities associated with the downstream activity from  
4 among the plurality of activities; and  
5 generating a reliability buffer duration value that reduces a simulated schedule delay to  
6 the project schedule that occurs due to simulated schedule delays of respective ones of the one or  
7 more upstream activities, and that increases a simulated schedule advance to the project schedule  
8 that occurs due to simulated schedule advances of respective ones of the one or more upstream  
9 activities.

1 12. (Currently Amended) The reliability buffering method of claim 11, wherein generating the  
2 reliability buffer duration value comprises:  
3 selecting a plurality of reliability buffer duration values; and  
4 for each of the plurality of reliability buffer duration values,  
5 generating a simulated project schedule and a simulated project cost; and  
6 analyzing the simulated project schedules and the simulated project costs  
7 associated with the plurality of reliability buffer duration values; and  
8 selecting the reliability buffer duration value and the associated project schedule  
9 corresponding to a smallest simulated project schedule or associated with a smallest simulated  
10 project cost.

1 13. (Original) The reliability buffering method of claim 9, wherein generating the activity time  
2 precedence relationship comprises:

3           selecting a time precedence relationship from the group consisting of a finish to start  
4 relationship, a finish to finish relationship, a start to finish relationship, and a finish to start  
5 relationship;

6           selecting one or more upstream activities associated with the downstream activity from  
7 among the plurality of activities; and

8           generating a reliability buffer lead or lag value that reduces a simulated schedule delay to  
9 the project schedule that occurs due to simulated schedule delays of respective ones of the one or  
10 more upstream activities, and that increases a simulated schedule advance to the project schedule  
11 that occurs due to simulated schedule advances of respective ones of the one or more upstream  
12 activities.

1   14. (Original) The reliability buffering method of claim 9, further comprising:

2           adding policy data to the project plan data.

1   15. (Previously Presented) The reliability buffering method of claim 14, wherein adding policy  
2 data comprises:

3           adding at least one of:

4               a manpower availability versus time value;

5               a overtime and flexible headcount control value,

6               a time buffer,

7               a thoroughness of quality control value;

8               a hiring time control value, or

9               a request for information (RFI) time duration value to the project plan data.

1   16. (Original) The reliability buffering method of claim 9, further comprising:

2           updating the project plan data to provide an updated reliability buffer project plan.

1   17. (Currently Amended) A project management system comprising:

2           a project data processor to provide project plan data; and

3 a reliability buffer processor adapted to receive the project plan data and to generate a  
4 project plan with reliability buffers, each one of the reliability buffers associated with a  
5 respective downstream activity.

1 18. (Previously Presented) The project management system of claim 17 further including a  
2 project plan processor adapted to provide conventional project plan data to the project data  
3 processor, and wherein the project data processor is adapted to receive the conventional project  
4 plan data and to provide the project plan data.